Joint LACMD Elevated Netted Sensors Systems (JLENS)

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Essential R&D/Leap-Ahead Technologies

MISSION

Provide over-the-horizon land attack cruise missile defense; enhance cruise missile detection; provide extended engagement ranges that support the Air-Directed Surface-to-Air Missile (ADSAM) engagement concept for current air defense weapons such as Patriot, Standard Missile, and the Advanced Medium Range Air-to-Air Missile.

DESCRIPTION AND SPECIFICATIONS

The Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS), is a cost-effective, airborne sensor platform that provides over-the-horizon land attack cruise missile defense. The JLENS advanced sensor technologies, when elevated, will provide battlefield commanders with the following:

- Detection and tracking of low-altitude threats (cruise missile and aircraft) that may go undetected by surface-based sensors due to terrain masking and line-of-sight locations of targets
- Support of ADSAM engagements, including engage-on-remote and forward pass
- Development and display of the single integrated air picture
- Detection and tracking of enemy surface units

These technologies provide a low cost, long-endurance capability to protect U.S. troops and assets in foreign lands, and provide a significant contribution to the defense of the continental U.S. and the public from cruise missile attacks.

The JLENS sensor suite consists of a surveillance radar (SR) and a precision track and illumination radar (PTIR). SR provides a long-range air picture enhanced by identification friend or foe (IFF). This information, distributed via the Joint Data Network and Joint Composite Tracking Network (presently LINK 16 and cooperative engagement capability), contributes to the SIAP. PTIR is a steerable, lightweight array capable of tracking multiple targets in a sector. JLENS prioritizes remote and local tracks autonomously or accepts external requests for precision tracking and engagement support.

FOREIGN COUNTERPART

No known foreign counterpart

FOREIGN MILITARY SALES

None

PROGRAM STATUS

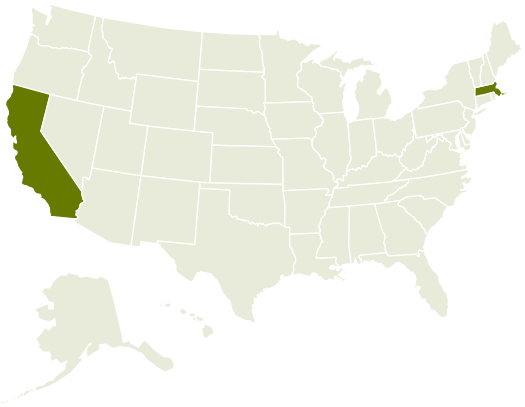
2QFY96 The Department of Defense and the Joint Chiefs of Staff directed the Army to take the lead in establishing a joint project office (Army, Navy, and Air Force). The U.S. Army Space and Missile Defense Command established the joint project office in Huntsville, AL, with Navy and Air Force deputy program managers.
4QFY97 Completed approval of the JLENS acquisition strategy. The JLENS project office then initiated concept studies and related risk-reduction efforts, subsequently issuing a competitive request for proposals.
2QFY98 Awarded JLENS demonstration contract to Raytheon.
2QFY99 Designated by the Army acquisition executive as an acquisition category II program. The JLENS program is currently in the program definition and risk reduction phase of the acquisition cycle, concentrating on prototype development and risk reduction activities.

PROJECTED ACTIVITIES

FY00–05 System design, integration, and demonstration efforts, leading to milestone II decision.

PRIME CONTRACTORS

Raytheon (Bedford, MA; El Segundo, CA)



* See appendix for list of subcontractors